

ABSTRACT OF THE DISCLOSURE

A method and apparatus determines an uncoded bit error rate  $p_b$  based on a target symbol error rate  $\epsilon_s$ . The uncoded bit error rate  $p_b$  is determined based on a weighted series expansion of the target symbol error rate  $\epsilon_s$ , comprising weights  $W$  that are a function of a maximum number of symbol errors that can be corrected  $t$  and a number of symbols in an information field  $K$ . The maximum number of symbol errors  $t$  and the number of symbols in the information field  $K$  is selected such that the uncoded bit error rate  $p_b$  that produces a symbol error rate that is less than or equal to the target symbol error rate  $\epsilon_s$  is largest.